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EXAMINER

DIEP, NHON THANH

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/537,240	TRUC ET AL.
	Examiner	Art Unit
	Nhon T Diep	2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-39 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-39 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 March 2000 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) Interview Summary (PTO-413) Paper No(s). _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 18, line 2, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 36-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Shishizuka et al (US 6,480,916).

Shishizuka et al discloses an information processing method and system for composite appliance comprising the same film scanning system comprises a computer, a high-speed interface coupled to the computer; a scanner coupled to the high-speed interface (fig. 1, el. 102, 103), the scanner comprising a plurality of subsystems in communication with the computer through the high speed interface, each subsystem including a microprocessor, each subsystem assigned a unique identifier, the scanner generating pixel data representative of scanned photographic images, the scanner providing the generated pixel data to the computer through the high-speed interface (col. 7, ln. 6 – col. 10, ln. 50) as specified in claim 36; the film scanning system wherein the high-speed interface is based on IEEE 1394 standard (fig. 3, IEEE 1394) as specified in claim 37; wherein the pixel data provided to the computer has a color depth of 12 to 16 bits per color, and 3 colors per pixel (figs. 40-50-51 and col. 37, ln. 10 – col. 38, ln. 15) as specified in claim 38.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6, 9, 11-14 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiFrancesco (US 5,815,202).

DiFrancesco discloses a method and apparatus for scanning an image using a moving lens system comprising the same photographic film scanning system for scanning a film media containing at least one photographic image and for creating digital representations of the photographic image or images, the system comprising: a light source; a light sensor; a film drive for advancing the film; a lens located between the light source and the light sensor for directing the light projected through the film media onto the light sensor; film type selection means for selecting a type of film to be scanned; adjustment means responsive to the film type selection means for changing the position of the lens and the position of the light sensor to provide proper focus for the selected type of film; and means for generating digital representations of the photographic images from the generated pixel data (fig. 1, el. 110, 118, 104, 114, 116, 122 and col. 3, ln. 65- col. 4, ln. 34, col. 6, ln. 12-30) as specified in claims 1 and 39; film color selection means; and light filter (fig. 4, col. 6, ln. 21-54) as specified in claims 4 and 6; speed adjustment means for automatically adjusting the speed of the film drive based on user entered scanning resolution data (col. 5, ln. 18-35 and ln. 50 – col. 6, ln. 11) as specified in claim 9; means for bending the film media longitudinally as it passes between the light source and the light sensor (fig. 1, el. 102, 112) as specified in claim 12; a guide track consisting of a left guide to guide a first edge of the film media and a right guide to guide a second edge of the film media (inherently included) as specified in claim 13. It is noted that DiFrancesco does not particularly disclose film type selection means for **manually** selecting a type of film to be scanned; adjustment means responsive to the film type selection means for **automatically** changing the position of

the lens and the position of the light sensor to provide proper focus for the selected type of film as specified in claims 1 and 39; however, since DiFrancesco teaches that the scanner as disclosed can be used to scan a wide variety of images stored on a semi-transparent medium, for example, single negatives and film of varying sizes and convert images to digital or analog signals (col. 3, ln. 66 – col. 4, ln. 3) and therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the current scanner of DiFrancesco by providing a selection means for selecting a type of film to be scanned, manually or automatically so his scanner can be used to scan a wide variety of film type as taught and then in order to provide proper focus for the selected type of film, automatically changing the position of the lens and the position of the light sensor. Doing so would help to speed up the scanning process.

With regard to claim 2: Since APS (Advanced Photo System) film is a well known film type so it would have been obvious that this type of film is part of the a wide variety of images stored on a semi-transparent medium, for example, single negatives and film of varying sizes and therefore this limitation is met by DiFrancesco.

With regard to claims 3, 5 and 14: It would have been further obvious that various of selecting positions should be provided to accommodate many different types of film and that guide track adjustment means responsive to the film type selection means for adjusting the distance between the left guide and the right guide should also be part of the modification which includes the selection means.

With regard to claim 11: It is the examiner's opinion that the first and second position sensors, wherein the first position sensor detects when the lens reaches a first

predetermined position, and the second position detects when the light sensor reaches a second predetermined position as specified in claim 11 would be part of the quality control for the proposed modification as indicated in claim 1, since scanned images would be bad if positions of lens and light are not in the predetermined positions corresponding to different types of film.

7. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Difrancesco, in view of Gu (US 5,874,988).

As applied to claim 1 above, it is noted that DiFrancesco does not particularly disclose the means adjusting a gain of the pixel data and an offset of the pixel data as specified in claim 7 and are programmable by a user as specified in claim 8. Gu teaches a system and methods automated color correction includes means for adjusting a gain of the pixel data and an offset of the pixel data (col. 16, ln. 44-59) and that these adjustments are programmable (col. 11, ln. 64 – col. 12, ln. 19). Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of DiFrancesco by applying the teaching of Gu with regard to gain and offset adjustments. Doing so would help to produce a better image quality.

8. Claim 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Difrancesco, in view of Sawanobori (US 6,486,980).

As applied to claim 1 above, it is noted that Difrancesco does not particularly disclose means for displaying the digital representation of the photographic images as specified in claim 10. Sawanobori teaches the displaying of images (col. 2, lines 1-24) and therefore, it would have been obvious to one of ordinary skilled in the art at the time

the invention was made to modify the system of Difrancesco by displaying scanned images as taught by Sawanobori. Doing so would help to check and control scanned image quality.

9. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Difrancesco, in view of Truc et al (US 6,100,924).

As applied to claim 1 above, it is noted that DiFrancesco does not particularly disclose an infrared filter located between the light source and the light sensor, the infrared light filter for preventing infrared light being projected on the light sensor as specified in claim 15; and a light tunnel located between the light source and the light sensor, the light tunnel preventing substantially all light from reaching the light source except the light projected through the film media as specified in claim 16. Truc et al teaches an infrared light filter is located within opening 192 of spacer 188. The infrared light filter prevents infrared light from getting through to light sensor. Lens 84 is contained within lens holder 196. The lens and the lens holder fit within groove 190 of spacer 188. Spacer 188 serves three important functions: It provides the necessary spacing between the lens and the light sensor, it filters out infrared light, and the raised edges 194 of the spacer serve as a light tunnel so that the only light entering opening 192 is the light passing through the lens 84 (col. 3, ln. 53 – col. 4, ln. 30). Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Difrancesco to provide infrared light filter and light tunnel as taught by Truc et al. Doing so would help to obtain better images.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Difrancesco, in view of Yamasaki (US 5,477,353).

As applied to claim 1, it is noted that Difrancesco does not particularly disclose a code sensor for projecting light through a first edge of the film media where coded data is located, the code sensor generating signals representative of the coded data on the film media as specified in claim 17. Yamasaki teaches a film frame number bar-code sensor 42 provided near the film carrier 34 senses the frame number information bar code on the film 8 as shown in FIG. 3B. A film identification code reader 43 reads the film identification code. Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of DiFrancesco to provide a code sensor to read coded data. Doing so would help to speedily and accurately read important coded data.

11. Claims 18-22, 24, 27, 29 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiFrancesco, in view of Truc et al.

DiFrancesco discloses a method and apparatus for scanning an image using a moving lens system comprising the same scanner for generating pixel data from photographic film media, the scanner comprising: a film drive for advancing the film; a lens located between the light source and the light sensor for directing the light projected through the film media onto the light sensor; film type selection means for selecting a type of film to be scanned; adjustment means responsive to the film type selection means for changing the position of the lens and the position of the light sensor to provide proper focus for the selected type of film; and means for generating digital

representations of the photographic images from the generated pixel data (fig. 1, el. 110, 118, 104, 114, 116, 122 and col. 3, ln. 65- col. 4, ln. 34, col. 6, ln. 12-30) as specified in claim 18; film color selection means; and light filter (fig. 4, col. 6, ln. 21-54) as specified in claims 23 and 24; speed adjustment means for automatically adjusting the speed of the film drive based on user entered scanning resolution data (col. 5, ln. 18-35 and ln. 50 – col. 6, ln. 11) as specified in claim 27; means for bending the film media longitudinally as it passes between the light source and the light sensor (fig. 1, el. 102, 112) as specified in claim 31; a guide track consisting of a left guide to guide a first edge of the film media and a right guide to guide a second edge of the film media (inherently included) as specified in claim 32. It is noted that DiFrancesco does not particularly disclose a first and a second inlet, the first inlet adapted to receive a plurality of types of photographic film strips, the second inlet adapted to receive slides and a first guide track and a second guide track for guiding the film and the slides, respectively through the scanner as specified in claim 18. Truc et al teaches a first and a second inlet, the first inlet adapted to receive a plurality of types of photographic film strips, the second inlet adapted to receive slides and a first guide track and a second guide track for guiding the film and the slides, respectively through the scanner (col. 9, ln. 34-67); further more, Truc et al also teaches an infrared light filter is located within opening 192 of spacer 188. The infrared light filter prevents infrared light from getting through to light sensor. Lens 84 is contained within lens holder 196. The lens and the lens holder fit within groove 190 of spacer 188. Spacer 188 serves three important functions: It provides the necessary spacing between the lens and the light sensor, it filters out

infrared light, and the raised edges 194 of the spacer serve as a light tunnel so that the only light entering opening 192 is the light passing through the lens 84 (col. 3, ln. 53 – col. 4, ln. 30) as specified in claims 33-34 and therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the current scanner of DiFrancesco by providing a first and a second inlet, the first inlet adapted to receive a plurality of types of photographic film strips, the second inlet adapted to receive slides and a first guide track and a second guide track for guiding the film and the slides, respectively through the scanner and an infrared light filter and light tunnel. Doing so would help to scan a variety of products and also help to obtain focus images.

With regard to claim 19: The combination of DiFrancesco and Truc et al would result in a system that can scan a variety of film types and as a result, it also would have been obvious to provide a selection means, manual or automatic, for selecting a type of film to be scanned.

With regard to claim 20: Since APS (Advanced Photo System) film is a well known film type so it would have been obvious that this type of film is part of the a wide variety of images stored on a semi-transparent medium, for example, single negatives and film of varying sizes and therefore this limitation is met by the combination of DiFrancesco and Truc et al.

With regard to claims 21, 22 and 32: It would have been further obvious that various of selecting positions should be provided to accommodate many different types of film and that guide track adjustment means responsive to the film type selection

means for adjusting the distance between the left guide and the right guide should also be part of the modification which includes the selection means.

With regard to claim 29: It is the examiner's opinion that the first and second position sensors, wherein the first position sensor detects when the lens reaches a first predetermined position, and the second position detects when the light sensor reaches a second predetermined position as specified in claim 29 would be part of the quality control for the proposed modification as indicated in claim 18, since scanned images would be bad if positions of lens and light are not in the predetermined positions corresponding to different types of film.

12. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of DiFrancesco and Truc et al, and further in view of Gu (US 5,874,988).

As applied to claim 18 above, it is noted that the combination of DiFrancesco and Truc et al does not particularly disclose the means adjusting a gain of the pixel data and an offset of the pixel data as specified in claim 25 and are programmable by a user as specified in claim 26. Gu teaches a system and methods automated color correction includes means for adjusting a gain of the pixel data and an offset of the pixel data (col. 16, ln. 44-59) and that these adjustments are programmable (col. 11, ln. 64 – col. 12, ln. 19). Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of the combination of DiFrancesco and Truc et al by applying the teaching of Gu with regard to gain and offset adjustments. Doing so would help to produce a better image quality.

13. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of DiFrancesco and Truc et al, in view of Sawanobori (US 6,486,980).

As applied to claim 18 above, it is noted that the combination of DiFrancesco and Truc et al does not particularly disclose means for displaying the digital representation of the photographic images as specified in claim 28. Sawanobori teaches the displaying of images (col. 2, lines 1-24) and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of the combination of DiFrancesco and Truc et al by displaying scanned images as taught by Sawanobori. Doing so would help to check and control scanned image quality.

14. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of DiFrancesco and Truc et al, in view of Yamasaki (US 5,477,353).

As applied to claim 18, it is noted that Difrancesco does not particularly disclose a code sensor for projecting light through a first edge of the film media where coded data is located, the code sensor generating signals representative of the coded data on the film media as specified in claim 35. Yamasaki teaches a film frame number bar-code sensor 42 provided near the film carrier 34 senses the frame number information bar code on the film 8 as shown in FIG. 3B. A film identification code reader 43 reads the film identification code. Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of the combination of DiFrancesco and Truc et al to provide a code sensor to read coded data. Doing so would help to speedily and accurately read important coded data.

Conclusion

Art Unit: 2613

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Imaizumi et al (US 6,236,389) discloses an image editing apparatus capable of setting image processing region on display screen.
- b. DiFrancesco et al (US 6,172,705) discloses a method and apparatus for a film scanner interface.
- c. Kunishige (US 6,172,704) discloses a film scanner apparatus.
- d. Wally, Jr. et al (US 5,574,577) discloses a method and apparatus for digitally archiving analog images..
- e. Milward (US 4,205,337) discloses a television film scanner.
- f. Mancio et al (US 6,301,002) discloses a film holder.
- g. Hsu (US 5,555,106) discloses a single pass line scanning with a color filter wheel having a plurality of filters.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T Diep whose telephone number is 703-305-4648. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on 703 305-4856. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-2600.


NHON DIEP
PRIMARY EXAMINER